

fessional or amateur—can ransack the libraries of the world and after a deal of researching can proclaim further change due to a doubtful publication date or a dubious description or an erroneous figure reference; and so armed he may then swell the muddy flood of synonymy by throwing in more confusion, more names in brackets, more abbreviated authors and more chain reactions with incalculable consequences. Such a learned study will be utterly indifferent to the natural relationship of the insects themselves for the rules of the game are the rules of a word game and they are invented and invoked by persons whose preoccupation is with names and not living creatures.

I especially share Dr Ainley's concern for the genus, a concept that has become so abused that it is nowadays fast losing its purpose. I, too, thought that one of the wisdoms of binomial nomenclature was to indicate the natural affinities between living things, I, too, had always hoped that classification was a natural science that endeavoured to show relationships between individuals, and I, too, believed that names were of significance in achieving this. But I found that Checklists were issued with no indication of why species were placed in their genera, and textbooks were published with no real attempt at justifying how the genera and families were arranged.

The game is no new pastime of course, as reference to journals over the years will show. It just gets bursts of enthusiasm from time to time which appear to be due to whims and caprices of the player who has time to spare at any particular moment. We might have thought that researches over the past sixty years would have resolved most names by now and the violent upheavals that nomenclature and field workers have suffered could have been borne in quest of finality and perfection. But finality is a snare and perfection is a fancy, and the rules of the game ensure that no solution can be ever reached.

My answer to all this is simple. I have caught, reared or otherwise handled most of the larger British moths and I think I know something of them and their habits in the field, and a bit about their life histories and early stages; I have studied Seitz and Meyrick, Ford and Pierce, and I think I am aware of the principal structures that can be meaningfully employed in the classification of these insects. So I have produced my own classification and my own genera, and although I have tried to conform with accepted nomenclatural practice I have gone my own way where I have thought necessary, and I readily expect that my system may be full of pre-occupied names and obsolete genera. But this does not worry me. My collections, both of set moths and the Hammond-Haggett larval collection, are arranged and labelled according to the way I believe the species are related. And the genera I have used clearly indicate this relationship.

But when I submit a paper or note for publication I have to translate these names to a current list and even then I expect to see them mutilated and battered so that I can scarcely recognize what I have written, and at the present rate of change I shall not even know what insects I have written about. Perhaps that is why I am writing less.

A note on *Bittacus angulosus* Tjeder (Mecoptera, Bittacidae)

By J. S. TAYLOR

While collecting insects with my friend Mrs N. Gardiner on the grassy slopes immediately below Hilton, Natal (3,700 ft.) on 14th March 1966, we disturbed in the long grass what I at first thought to be a tipulid. When, just afterwards, another individual was seen to be carrying a small beetle, the matter was investigated further, and several of these curious-looking insects were obtained. They proved to belong to the Mecoptera, and later, on reference to Imms (1957) to a species of Bittacidae.

Anything more unlike the usual kind of scorpion-fly (*Panorpa* spp.) could scarcely be imagined. It is a reddish-brown insect, with long and elongate wings and particularly long and slender legs. Imms (*op. cit.*) refers to resemblance to the Tipulidae of this family of Mecoptera, as also does the Cambridge Natural History (1901) which figures a species, significantly named as *Bittacus tipularius*.

Material from Hilton was submitted to Dr. Bo Tjeder of the University of Lund, Sweden, who determined it as being *Bittacus angulosus*, a species which he had described (1956) from a female specimen collected at Krantz Kloof, Natal. According to Dr Tjeder (*op. cit.*), 2 genera and 18 species have been recorded in South Africa while "all species of the order hitherto known from Africa belong to this family which is easily distinguished from all other families by having one single claw on each tarsus and the legs modified to raptorial use, being very long and having the tarsi so constructed that they can be curled round a captured insect. All other Mecoptera have tarsi with two claws and legs of moderate length and usual shape".

As little seems to be known of the life-history and habits of these interesting insects, it is felt that the few notes we made on *B. angulosus* may be worthy of record.

The curious method of capturing passing insects with the third pair of legs and then by their means conveying the prey to the mouth, while hanging suspended by the other legs from a twig or grass stem, was recorded independently by Mrs Gardiner who had a caged pair under observation. This habit is mentioned by both Imms (*op. cit.*) and in the Cambridge Natural History (*op. cit.*) the latter having a figure of *B. tipularius* in the act of capturing an insect. The bittacids at Hilton were often seen perched at the tip of a twig or grass stem, presumably in wait for passing insect prey. The latter was varied, and included a chrysomelid beetle, a small lycaenid butterfly, a larval grasshopper about one inch in length, and the Hive Bee (*Apis mellifera*), this last being recorded on several occasions. It seemed surprising that such a stout and formidable insect as the Hive Bee should be subdued by such a frail-looking and slender creature as the bittacid.

During the heat of the day the bittacid seeks shade down in the grass or elsewhere, but in cooler weather and in the early morning it is usually to be seen perched upon grass stems and the like. When disturbed it generally flies a short distance before settling again.

At Hilton in 1966 it continued to be present until the advent of the cold weather at the beginning of May, and it was not noted again until 26th February 1967. Its late appearance may have been due to the cool and wet summer of that year. The individuals then seen were lethargic and were obviously freshly emerged. *B. angulosus* would appear to be single brooded. It was also recorded at Karkloof, Natal, by Mrs. Gardiner, and in this case again carrying a hive bee.

Little seems to have been noted of the early stages of the Bittacidae, but they are said to be similar to those of the more well-known Panorpidae.

I am much indebted to Mrs Nancy Gardiner, Hilton, Natal, for her kind assistance in the study of this interesting insect, as well as for the use of her observations, and to Dr. Bo Tjeder of the University of Lund, Sweden, for his kindness in determining the insect, and also for supplying literature.

REFERENCES

- Sedgwick, A., Sinclair, F. G., and Sharp, D. 1901. Cambridge Natural History v, *Peripatus, Myriopods and Insects*, Pt. 1. London. pp. 451-452.
Imms, A. D. 1967. *Textbook of Entomology*, London. pp. 505-509.
Tjeder, Bo. 1956. *Mecoptera*. S.A. Animal Life, iii. Upsala. pp. 344-390.

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A new species of *Thestor* Hubner (Lepidoptera)

By D. A. SWANEPOEL

Thestor stepheni sp. nov.

This recently discovered "black" species would at first sight appear to be very similar to most of its congeners but when closely examined it is seen that it comes closest to *Thestor holmesi* van Son. from which it differs as follows:—The rather more uniform spread of the strikingly whitish-grey colouring over so much of the underside of the hindwings (but with some specimens of both species no different in this respect); the median spots in the hindwing on the upperside tend to be smaller (though not constantly so); the median spots in the forewing are usually smaller and discocellular mark of the hindwing underside is, on the whole wider (less linear than is often the case in *holmesi* and *penningtoni*).

Male holotype: blackish-brown on the upperside with chequered margins, sex-mark not as conspicuous as in *holmesi*. Median spots small and indistinct. Underside—slate grey. Median spots smaller than those of most *holmesi* specimens. Length of forewing: 16.25 mm. (or exp.: 31 mm.).

Female allotype: larger than the male, with rounder wings and the general colouring is not quite as blackish as in the male. The general tone of the forewing underside is not as grey as in the male, but rather suggests a dark brown colouring.

The median spots as well as the discocellular mark of the hindwing underside are well developed. The submarginal row is distinct. Length of forewing: 17 mm. (or exp.: 34 mm.).

In both sexes, small postdiscal markings of the forewing underside either not saggitate or less so than is nearly always the case in *holmesi* (more towards apex): this applying on the whole, also to the hindwing.

Material examined: Boesmanskloof Pass (Robertson dist., Cape) R.D. Stephen male holotype; idem, 19.xii.1965, R. D. Stephen female allotype; idem, 16.xii.1964, two paratypes one male idem, 19.xii.1965, one female idem, 16.xii.1964, in collection D. A. Swanepoel. The allo and holotype are in Mr. Stephen's collection.

I have much pleasure in naming this new species after its captor Mr. R. D. Stephen of Cape Town.